

In The Claims

Please amend claims 1-16 and add new claims 17-52, as indicated in the APPENDIX A attached hereafter. The entire set of the pending claims, including the amended claims and newly added claims is provided in the APPENDIX B attached hereafter.

REMARKS

In response to the Office Action dated October 8, 2002, claims 1-16 have been amended and claims 17-52 are newly added. Claims 1-52 are active in this application, of which claims 1 and 12, 17, 21, 23, 29, 31, 40, 43 and 48 are independent.

Based on the above Amendments and the following Remarks, Applicants respectfully request that the Examiner reconsider the outstanding objections and rejections and they be withdrawn.

Specification Objection

In the Office Action, the specification has been objected to because the Abstract of the Disclosure has more than 150 words. In this response, the Abstract has been amended to correct this matter. Thus, withdrawal of the objection is respectfully requested.

Rejections Under 35 U.S.C. §112

In the Office Action, claims 1, 4, 11 and 14 have been rejected under 35 U.S.C. §112, second paragraph for indefiniteness. This rejection is respectfully traversed.

In this response, claims 1, 4, 11 and 14 have been amended to correct the indefiniteness issues raised by the Examiner. Accordingly, Applicants respectfully request that the rejection over claims 1, 4, 11 and 14 be withdrawn.

Rejections Under 35 U.S.C. §102

In the Office Action, claims 1-16 have been rejected under 35 U.S.C. §102(e) for being anticipated by U. S. Patent No. 6,195,140 issued to Kubo, *et al.* ("Kubo"). This rejection is respectfully traversed.

In this response, independent claim 1 has been amended to clarify the different between the claimed invention and Kubo by incorporating the limitations of claim 2. Amended claim 1 recites "A reflective transmission type thin film transistor liquid crystal display (TFT LCD) comprising: ... a transmissive pixel electrode ...; a reflective pixel electrode ...; and a buffer layer formed between the transmissive pixel electrode and the reflective pixel electrode ...".

An example of this claimed feature is shown in Fig. 7 of the present application, in which a buffer layer (i.e., separating insulator 19) is formed between a transmissive pixel electrode 18 and a reflective pixel electrode 20.

As pointed out in the background portion of the present application, "in the process of fabricating the reflective transmission type LCD, some *problems* can caused according to the *materials* adopted as transmissive pixel electrode and reflective pixel electrode" (Specification, page 2, lines 16-19). Particularly, when "the reflective pixel electrode made with aluminum, is electrically connected with the source electrode by the transmissive pixel electrode which covers the source electrode" and "the transmissive pixel electrode is made with ITO (indium tin oxide)",

“oxidation layer is to be formed between the reflective pixel electrode and transmissive pixel electrode” (Specification, page 2, lines 18-23) to improve the contact therebetween.

In this regard, as shown in Fig. 46, Kubo teaches a high reflection layer 242 (Al) formed *directly* on a high transmission layer 246 (ITO). Thus, Kubo fails to teach or suggest the claimed feature of *“a buffer layer formed between the transmissive pixel electrode and the reflective pixel electrode”*. Thus, the structure shown in Kubo would suffer the contact problem between the aluminum reflection layer 242 (Al) and the ITO transmission layer 246 (ITO).

Therefore, it is submitted that independent claim 1 is patentable over Kubo. Claims 2-11 that are dependent from claim 1 would be also patentable at least for the same reason.

Independent claim 12 recites *“a second pixel electrode ... connected to the source electrode through the contact hole and connected to the non-oxidizing metal layer through the hole”*. An example of this claimed feature is shown in Fig. 16, in which a reflective pixel electrode 20 (claimed second pixel electrode) is formed on the passivation layer 17, connected to the source electrode 14 through the contact hole, and connected to the chromium layer 61 (claimed non-oxidizing metal layer) through the hole formed in the passivation layer 17.

To meet this claimed limitation, according to the Examiner's assertion, the pixel electrode 206 (asserted second pixel electrode) should be connected to the metal layer 203b of the source line 203. However, Kubo fails to show this claimed feature.

Further, claim 12 recites *“a passivation layer ... having a contact hole exposing a source electrode of said thin film transistor and a hole exposing the transparent window; and a second pixel electrode formed over said passivation layer, patterned to expose the transparent window region”*. Fig. 16 of the present application shows the passivation layer 17 having a contact hole exposing the source electrode 14 and a hole exposing the transparent window. The reflective

pixel electrode 20 (claimed second pixel electrode) is patterned to expose the transparent window.

In this regard, Fig. 46 of Kubo shows only a contact hole formed in the passivation layer 244 that exposes a connecting electrode (i.e., claimed source electrode), but fails to show a hole that exposes the claimed transparent window, as claimed. Thus, Kubo is very distant from the present invention. Thus, it is submitted that independent claim 12 is patentable over Kubo. 13-16 that are dependent from claim 12 would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request that the rejection over claims 1-16 be withdrawn.

Other Matters

In addition to the amendment mentioned above, claims 1-16 have been further amended for clarification and better wording.

In this response, claims 17-52 are newly added to claim different embodiments of the present invention.

CONCLUSION


All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, claims 1-52 are in condition for allowance. If the Examiner believes, for any

reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that any extensions of time or fees for net addition of claims are required at this moment. However, if additional extension of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 23-1951.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,


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